

REMARKS

Claims 1 to 21 were pending in the application at the time of examination. Claims 1 to 21 stand rejected as obvious.

The Examiner required submission of formal drawings even though the original drawings filed were designated as formal. Moreover, no indication was given of problems with the drawings as filed. Nevertheless, replacement sheets are enclosed as noted above. In the replacement sheets of drawings, minor informalities have been corrected such as lines going through reference numerals, etc.

The Examiner appears to equate "a scatter/gather list" with "a scatter/gather list section" in the official action, which in turn suggests that no weight is being given to the preamble of the claims. To avoid a discussion on the weight afforded the preamble, Claims 1, 14, and 15 have been amended to recite that the scatter/gather list sections are included in the scatter/gather list. This is fully equivalent to the original claim and so fails to affect the scope or the patentability of these claims.

Also, Claims 1, 14, 15, 16, and 18 have been amended to clarify that the "at least one scatter/gather list section" is included in the plurality of scatter/gather list sections.

Claims 19 and 20 have been amended to correct an antecedent basis informality. Claim 19 is also amended to correct an informality in punctuation.

Claims 1 to 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,665,746 B1, hereinafter referred to as Liong, in view U.S. Patent No. 6,105,080, hereinafter referred to as Holt.

The Examiner first stated in part, "Liong discloses the claimed 'a plurality of scatter/gather list sections stored in a memory,'" citing to Col. 2, lines 10 to 25, which state:

the steps of manipulating the transfer of data between memory devices by processing, an element at a time, entries in a **first scatter/gather list**; upon receipt of a request to process a **second scatter/gather list**, interrupting the processing of the **first scatter/gather list**; and resuming the processing of the **first scatter/gather list** upon the completion of the processing of the **second scatter/gather list**. In one embodiment, this first method is further defined such that the step of interrupting the processing of the **first scatter gather list** interrupts only at the completion of the processing of an element of the **first scatter/gather list** and prior to the retrieval of the next element in the **first scatter/gather list**. In another embodiment, the method is further defined such that interrupting step further includes storing the next address to be processed in the **first scatter/gather list**, and retrieving the first element in the **second scatter/gather list**. (Emphasis added.)

This section fails to teach or suggest that a single scatter/gather list includes a plurality of sections. The elements referred to are elements as acknowledged in the background section of Applicant's disclosure that make up the scatter/gather list. Manipulation of multiple scatter/gather lists as taught in the above quotation is unrelated to Applicant's invention as recited in Claim 1. The fact that a list can be interrupted between elements fails to suggest or disclose anything concerning the structure of the scatter/gather list.

In fact, Liong suggests that only a normal structure of elements is needed and special processing is required only if a request is received to process the second list while the first is being processed. Otherwise, the first list continues normally.

The Examiner next cited Col 2., lines 28 to 40 of Liong as teaching "at least one scatter/gather list section." Again, this section describes the same two first and second scatter/gather lists. The fact that multiple scatter/gather lists are used teaches away from a single list as recited in Applicant's Claim 1.

The Examiner would have to modify what is taught as two scatter/gather lists in Liong to be two sections in a single list. The MPEP directs:

**FACT THAT REFERENCES CAN BE COMBINED OR MODIFIED IS NOT SUFFICIENT TO ESTABLISH *PRIMA FACIE* OBVIOUSNESS**

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)

MPEP § 2143.01, 8th Edition, Rev. 2, p.2100-131 (May, 2004).

The Examiner has cited no teaching in the prior art for the modification of Liong to define sections. Accordingly, the references, as cited by the Examiner, fail to suggest or disclose the scatter/gather list as recited in Claim 1.

Next, the Examiner cited Col. 6, lines 14 to 60 of Liong as teaching "a plurality of data elements." Liong stated;

... the data structure 400 for an element within the scatter/gather list typically includes a local address pointer 401, a system address pointer 402 (such as a PCI address pointer), a transfer configuration byte 404, a byte count 406, and a link address pointer 408.

.... Transfer configuration byte 404 includes a read/write bit (R/W bit) 450, an enable transfer interrupt bit (ENABLE XFER) 452, a link bit (LINK) 454, and an Endian byte swapping bit (ENDIAN BYTE SWAP) 456.

Liong, Col. 6, lines 62 to 67, and Col. 7, line 25 to 29.

The Examiner admitted that this structure fails to teach or suggest Applicant's invention as recited in Claim 1 and so cited to Holt. The Examiner failed to cite any teaching of sections of a scatter/gather list in Holt. Thus, Holt fails to make up for the basic deficiency in the primary reference.

Further, Holt taught "a reply flag" and also taught "When set, the reply flag (e.g., a bit within the S/G list entry) indicates that a reply is to be sent to the requesting host system following completion of the transfer of the corresponding source blocks to the associated destination." Holt, Col. 7, lines 29 to 33.

A reply flag for sending a reply to a host system has nothing to do with the flags of Applicant's invention as recited in Claim 1. The functions of the flags are entirely different. As taught by Applicant

a scatter/gather list 230 (Fig. 2A) that includes a plurality of sections 230A to 230C is used by a host adapter 250 without having to transfer and manage a count of either the number of elements in a section or the number of elements in the complete scatter/gather list.

Specification, pg. 8, lines 6 to 12.

Sending a reply to a host is unrelated to a structure as recited in Claim 1 that allows use of a scatter/gather list without transferring and managing a count of either the number of elements in a section or the number of elements in the complete scatter/gather list. The Examiner is required to consider these inherent properties in the consideration of the invention as a whole.

Specifically, the MPEP requires:

**DISCLOSED INHERENT PROPERTIES ARE PART OF "AS A WHOLE" INQUIRY**

"In determining whether the invention as a whole would have been obvious under 35 U.S.C. 103, we must first delineate the invention as a whole. In delineating the invention as a whole, we look not only to the subject matter which is literally recited in the claim in question... but also to those properties of the subject matter which are inherent in the subject matter *and* are disclosed in the specification. .

MPEP § 2141.02, 8th Edition, Rev. 2, p.2100-126 (May, 2004).

The inherent properties as quoted above were disclosed in the specification and so must be considered by the Examiner. The reply flag for sending a message to a host computer fails to suggest or disclose either of the flags recited in Claim 1, which are for an entirely different function. Moreover, the Examiner's motivation for the modification is unrelated to Applicant's invention.

Any one of the above facts is sufficient to overcome the Examiner's rejection. Thus, Applicant has demonstrated

that the obviousness rejection is not well founded for multiple reasons. Accordingly, Applicant requests reconsideration and withdrawal of the obviousness rejection of Claim 1.

Claim 2 to 13 depend from Claim 1 and so distinguish over the combination of references for at least the same reasons as Claim 1. Applicant respectfully requests reconsideration and withdrawal of the obviousness rejection of each of Claims 2 to 13.

Claim 14 includes limitations similar to those discussed above with respect to Claim 1 and so that discussion is incorporated herein by reference. In addition, the scatter/gather list section comprises "a plurality of data elements" and "a link element." The examiner has failed to cite any teaching or suggestion of such a section with two different elements as recited in Claim 14. Accordingly, Applicant requests reconsideration and withdrawal of the obviousness rejection of Claim 14.

With respect to the rejection of Claim 15, the Examiner relies upon the rejection of Claim 1 to 13. However, Claim 15 recites in part:

wherein each data element **consists of**

.....

a link element **consisting of:**

an address field

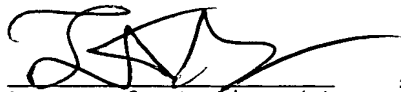
Claims 1 to 13 do not include either "consists of," or "consisting of." As is known to the Examiner these are terms of art that narrows the claim. Accordingly, the Examiner has failed to establish a prima facie obviousness rejection because explicit limitations have not been addressed. Moreover, the above comments with respect to the shortcomings of the two references are also applicable to Claim 15. Applicant requests reconsideration and withdrawal of the obviousness rejection of Claim 15.

Claim 16 to 21 include limitations similar to those discussed above with respect to Claim 1 and so that discussion is incorporated herein by reference. Accordingly, Applicant requests reconsideration and withdrawal of the obviousness rejection of each of Claims 16 to 21.

Claims 1 to 21 remain in the application. Claims 1, 14, 15, 16, and 18 to 20 have been amended. For the foregoing reasons, Applicant(s) respectfully request allowance of all pending claims. If the Examiner has any questions relating to the above, the Examiner is respectfully requested to telephone the undersigned Attorney for Applicant(s).

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on August 12, 2004.



Attorney for Applicant(s)

August 12, 2004  
Date of Signature

Respectfully submitted,



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